WHAT IS CLAIMED IS:

1. A method for decreasing spermine and/or spermidine levels in a human prostate cell comprising administering to said cell α-difluoromethylornithine (DFMO) in an amount and duration sufficient to decrease the spermine and/or spermidine levels in said cell.

2. The method of claim 1, wherein said prostate cell is a cancer cell.

3. The method of claim 1, wherein said prostate cell is a non-cancerous cell.

4. The method of claim 1, wherein said prostate cell is a benign hyperplastic cell.

5. The method of claim 1, wherein said cell is in a patient.

6. The method of claim 1, wherein said DFMO is substantially free of the L enantiomer.

7. The method of claim 5, wherein said duration is about 3 to 8 weeks.

8. The method of claim 5, wherein said duration is 2 to 6 months.

9. The method of claim 5, wherein said duration is at least 6 months.

10. The method of claim 5, wherein said duration is at least 1 year

11. The method of claim 5, wherein said duration is at least 10 years.

12. The method of claim 5, wherein said duration is at least 20 years.

13. The method of claim 5, wherein said duration is at least 40 years.

14. The method of claim 5, wherein said amount is about 0.1 to 2.0 gm/m^2/day.

15. The method of claim 5, wherein said amount is at least about 0.5 gm/m^2/day.

16. The method of claim 5, wherein said amount is about 0.5 gm/m^2/day.

17. The method of claim 5, wherein said amount is about 0.1 to 2.0 g/day.

18. The method of claim 5, wherein said amount is about 0.25 - 1.5 g/day.

19. The method of claim 5, wherein said amount is about 0.5 - 1.0 g/day

20. The method of claim 5, wherein DFMO is administered orally.

21. The method of claim 1, wherein spermine levels are reduced.

22. The method of claim 21, wherein said spermine levels are reduced about 20% as compared to the spermidine levels in said cell prior to said treatment.

23. The method of claim 21, wherein said spermine levels are reduced about 30% as compared to the spermidine levels in said cell prior to said treatment.

24. The method of claim 21, wherein said spermine levels are reduced about 40% as compared to the spermidine levels in said cell prior to said treatment.

25. The method of claim 21, wherein said spermine levels are reduced about 50% as compared to the spermidine levels in said cell prior to said treatment.

26. The method of claim 21, wherein said spermine levels are reduced about 60% as compared to the spermidine levels in said cell prior to said treatment.

27. The method of claim 21, wherein said spermine levels are reduced about 70% as compared to the spermidine levels in said cell prior to said treatment.

28. The method of claim 1, wherein spermidine levels are reduced.

29. The method of claim 28, wherein said spermidine levels are reduced about 30% as compared to the spermidine levels in said cell prior to said treatment.

30. The method of claim 28, wherein said spermidine levels are reduced about 45% as compared to the spermidine levels in said cell prior to said treatment.

31. The method of claim 28, wherein said spermidine levels are reduced about 55% as compared to the spermidine levels in said cell prior to said treatment.

32. The method of claim 28, wherein said spermidine levels are reduced about 65% as compared to the spermidine levels in said cell prior to said treatment.

33. The method of claim 28, wherein said spermidine levels are reduced about 75% as compared to the spermidine levels in said cell prior to said treatment.

34. The method of claim 28, wherein said spermidine levels are reduced about 85% as compared to the spermidine levels in said cell prior to said treatment.

35. The method of claim 28, wherein said spermidine levels are reduced about 99% as compared to the spermidine levels in said cell prior to said treatment.

36. The method of claim 1, wherein the spermidine/spermine ratio of said cell also is decreased.

37. The method of claim 36, wherein said spermidine levels are reduced about 99% as compared to the spermidine levels in said cell prior to said treatment.

38. The method of claim 1, further comprising a reduction in putrescine levels of at least 50%.

39. The method of claim 38, further comprising a reduction in putrescine levels of at least 70%.

40. The method of claim 39, further comprising a reduction in putrescine levels of at least 90%.

41. A method of treating a human subject afflicted with prostate cancer comprising administering DFMO to said subject in an amount and duration sufficient to reduce spermine and/or spermidine levels in prostate cells of said subject.

42. The method of claim 41, wherein said DFMO is substantially free of the L enantiomer.

43. The method of claim 5, wherein said duration is about 3 to 8 weeks.

44. The method of claim 5, wherein said duration is 2 to 6 months.

45. The method of claim 5, wherein said duration is at least 6 months.

46. The method of claim 5, wherein said duration is at least 1 year

47. The method of claim 5, wherein said duration is at least 10 years.

48. The method of claim 5, wherein said duration is at least 20 years.

49. The method of claim 5, wherein said duration is at least 40 years.

50. The method of claim 41, wherein said amount is about 0.1 to 2.0 gm/m^2/day.

51. The method of claim 41, wherein said amount is at least about 0.5 gm/m^2/day.

52. The method of claim 41, wherein said amount is about 0.5 gm/m^2/day.

53. The method of claim 5, wherein said amount is about 0.1 to 2.0 g/day.

54. The method of claim 5, wherein said amount is about 0.25 - 1.5 g/day.

55. The method of claim 5, wherein said amount is about 0.5 - 1.0 g/day

56. The method of claim 41, wherein DFMO is administered orally.

57. The method of claim 41, further comprising a second therapy.

58. The method of claim 57, wherein said second therapy comprises reducing dihydroxytestosterone.

59. The method of claim 57, wherein said second therapy comprises dietary antioxidants.

60. The method of claim 59, wherein said dietary antioxidant is selenium, vitamin E or both.

61. The method of claim 57, wherein said second therapy comprises retinoids.

62. The method of claim 57, wherein said second therapy comprises prostatectomy.

63. The method of claim 57, wherein said second therapy comprises low polyamine diet.

64. The method of claim 57, wherein said second therapy comprises an inhibitor of polyamine oxidase.

65. The method of claim 57, wherein said second therapy comprises radiation.

66. The method of claim 57, wherein said second therapy comprises hormonal therapy.

67. The method of claim 66, wherein said hormonal therapy comprises using luperon.

68. The method of claim 66, wherein said hormonal therapy comprises using zoledex.

69. The method of claim 66, wherein said hormonal therapy comprises using fultamide.

70. The method of claim 66, wherein said hormonal therapy comprises using casadex.

71. The method of claim 41, wherein spermine levels are decreased.

72. The method of claim 41, wherein spermidine levels are decreased.

73. The method of claim 41, wherein the spermidine/spermine ratio also is decreased.

74. The method of claim 41, further comprising diagnosis.

75. The method of claim 74, wherein said diagnosis comprises analysis of prostate specific antigen (PSA).

76. The method of claim 74, wherein said diagnosis comprises prostate biopsy.

77. The method of claim 74, wherein said diagnosis comprises rectal exam.

78. The method of claim 74, wherein diagnosis comprises analysis of PSA and rectal exam.

79. A method for inhibiting development of prostate cancer in a human subject comprising administering DFMO to said subject in an amount and duration sufficient to reduce spermine and/or spermidine levels in prostate cells of said subject.

80. A method for inhibiting prostate cancer metastasis in a human subject with primary prostate cancer comprising administering DFMO to said subject in an amount and duration sufficient to reduce spermine and/or spermidine levels in prostate cells of said subject.

81. A method for inhibiting prostate cancer progression in a human subject having Stage 1 or Stage 2 prostate cancer comprising administering DFMO to said subject in an amount and duration sufficient to reduce spermine and/or spermidine levels in prostate cells of said subject.

82. A method of rendering a human unresectable prostate cancer tumor resectable comprising administering DFMO to said subject in an amount and duration sufficient to reduce spermine and/or spermidine levels in prostate cells of said subject.

83. A method of inhibiting growth of a prostate cancer tumor in a human subject comprising administering DFMO to said subject in an amount and duration sufficient to reduce spermine and/or spermidine levels in prostate cells of said subject.

84. A method of treating benign prostate hyperplasia in a human subject afflicted with benign prostate hyperplasia comprising administering DFMO to said subject in an amount and duration sufficient to stabilize or reduce the amount of polyamine produced by the hyperplastic cells, wherein said polyamine is spermine, spermidine or a combination of spermine and spermidine.

85. The method of claim 84, wherein the polyamine is spermine.

86. The method of claim 84, wherein the polyamine is spermidine.

87. The method of claim 84, wherein the levels of prostate specific antigen (PSA) produced by the hyperplastic cells also are stabilized or reduced upon treatment with DFMO.

88. A method for treating benign prostatic hyperplasia in a human subject afflicted with benign prostatic hyperplasia comprising administering, for a sufficient duration, a therapeutically effective amount of DFMO, as measured by a reduction or stabilization of polyamine levels produced by the hyperplastic cells, together with a therapeutic effective amount of a second therapeutic agent selected from an α-1 adrenergic receptor blocker, a 5-α-reductase enzyme blocker, and a combination of an α-1 adrenergic receptor blocker, and a 5-α-reductase enzyme blocker.

89. The method of claim 88, wherein the polyamine is spermine.

90. The method of claim 88, wherein the polyamine is spermidine.

91. The method of claim 88, wherein the second agent is an α-1 adrenergic receptor blocker.

92. The method of claim 91, wherein the α-1 adrenergic receptor blocker is terazosin, doxazosin tamsulosin, prazicin or alfuzosin.

93. The method of claim 88, wherein the second agent is a 5-α-reductase enzyme blocker.

94. The method of claim 93, wherein the 5-α-reductase enzyme blocker is finasteride.

95. The method of claim 88, wherein the second agent is a hormone.

96. A method for treating benign prostatic hyperplasia in a human subject afflicted with benign prostatic hyperplasia comprising administering, over a sufficient duration, a therapeutically effective amount of DFMO, as measured by a reduction or stabilization of polyamine levels produced by the hyperplastic cells, together with a therapeutically effective amount of saw palmetto extract.

97. The method of claim 96, wherein polyamine is spermine.

98. The method of claim 96, wherein polyamine is spermidine.

99. The method of claim 96, wherein both spermine and spermidine levels are decreased or stabilized.